#### SECTION 01000

#### TERMS, DEFINITIONS AND ABBREVIATIONS

#### 1.1 Terms and Definitions

It is understood that wherever in the Virginia Department of Transportation Specifications and Standard Drawings handbook the term "Department" appears, it shall be construed to refer to the Loudoun County Department of Construction and Waste Management, except in references to said Virginia Department of Transportation as the author of the Specifications and Standard Drawings.

Whenever in the Virginia Department of Transportation Specifications and Standard Drawings, the term "District Engineer" appears, it shall be replaced by the term "Engineer" or "County Project Manager". The County reserves the right to enter into a separate contract with a consultant who shall serve as the County's Resident Engineer. The consultant shall be identified in final Contract Agreement between the County and the Contractor.

Whenever in the various Contract Documents the term "State" appears in the context of the governing body of the Commonwealth of Virginia, and whenever the terms "Board", "Virginia Department of Transportation" and "Department" appear in the context of the authority vested with the operation of the state's roadway network, such term shall remain unchanged.

In these specifications and in other contract documents, the following terms and pronouns used in place of them shall be interpreted as follows:

-A-

**Addendum** - A written revision or addition to any of the Contract Documents, transmitted in advance of the opening of proposals to all parties who have been recorded by the County as having secured full sets of Contract Documents.

**Advertisement, Notice of.** A public announcement, as required by law, inviting bids for work to be performed or materials to be furnished that indicates approximate principal quantities, location of work to be performed, character and quantity of materials to be furnished, and time and place for opening bids.

**Affiliate.** Any business entity which is closely associated to another business entity so that one has the power to control the other either directly or indirectly; or, where one business entity systematically shares resources, officers and/or other management with another business entity to the extent that a business relationship legally exists or is publicly perceived to exist; or, when a third party has the power to control both; or,

where one business entity has been so closely allied with another through an established course of dealings, including but not limited to the lending of financial wherewithal or engaging in joint ventures, so as to cause a public perception that the two firms are one entity.

**Alkali soil.** Soil in which total alkali chlorides calculated as sodium chloride are more than 0.10 percent based on total solids.

**Architect/Engineer, "A/E".** The consulting firm or County Agency, or their duly authorized representatives, lawfully licensed to practice in Virginia, that is responsible for designing or engineering the work, and performing the activities specified herein.

**Award.** The decision of the Board to accept the bid of the lowest responsive and responsible bidder for the work. The award is subject to the execution and approval of a satisfactory Contract therefore, and such conditions as may be specified or required by law.

**Award date.** The date on which the decision is made by the Board to accept the bid of the lowest responsive and responsible bidder.

-B-

**Backfill.** Material used to replace or the act of replacing material removed during construction; may also denote material placed or the act of placing material adjacent to structures.

**Balance point.** The approximate point, based on estimated shrinkage or swell, where the quantity of earthwork excavation and borrow, if required, is equal to the quantity of embankment material plus any surplus excavation material.

**Base course.** A layer of material of specified thickness on which the intermediate or surface course is placed.

**Base flood.** The flood or tide having a one percent chance of being exceeded in any given year.

**Bid.** The offer of a bidder, submitted on the proposal, to perform the work and furnish the materials and labor at the prices set forth therein; valid only when properly signed and guaranteed.

**Bidder.** Any individual, partnership, corporation, or joint venture that formally submits a bid for the work contemplated, or for any portion thereof, acting directly or through a duly authorized representative.

Bids, Invitation for. See Advertisement, Notice of.

Board. Loudoun County Board of Supervisors.

**Borrow.** Suitable material from sources outside the roadway that is used primarily for embankments.

**Brackish water.** Water in which total alkali chlorides calculated as sodium chloride are more than 0.10 percent based on total solids.

**Bridge.** A structure, including supports, that is erected over a depression or an obstruction, such as water, a highway, or a railway, that has a track or passageway for carrying traffic.

-C-

Calendar day. Any day shown on the calendar.

**Camber.** A vertical curvature induced or fabricated into beams or girders and a deck slab or slab span formwork; a vertical curvature set in the grade line of a pipe culvert to accommodate differential settlement.

**Channel.** A water course or drainage way.

**Commissioner.** Chairman, Loudoun County Board of Supervisors.

**Composite hydrograph.** A graph showing the mean daily discharge versus the calendar day, indicating trends in high and low flow for a one year period.

**Construction area.** The area where authorized construction occurs and as defined on the plans as the Temporary Construction Easement.

**Construction Limits.** The intersection of side slopes, including slope rounding, with the original ground, plus slopes for drainage ditches or incidental construction.

**Contract or Contract Agreement** - The written instrument used for signature and execution which binds the County and Contractor and is evidence of mutual understanding and agreement between the Parties. The Contract Agreement expressly incorporates and enumerates any documents therein which is referred to as the "Contract Documents".

Loudoun County Division I General Requirements 01000-3

Contract Documents - The Contract Documents are complimentary, and what is required by one shall be as binding as if required by all. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work, including without limitation, all labor, materials, equipment and furnishings required in connection therewith. Such incorporated documents customarily include but are not limited to; the Invitation for Bid, Contract Special Provisions, Loudoun County Specification Revisions to VDOT Division 1 General Provisions, the Plans, Loudoun County Purchasing Regulations, Contractor bid response, General Conditions, Supplemental General Conditions, VDOT Road and Bridge Specifications, Special Conditions, Plans, Insurance coverage/polices, bonds, Specifications, and all Modifications, including Addenda and subsequent Change Orders.

**Contract item.** A specifically described unit of work for which a price is provided in the Contract.

Contract time limit. The number of calendar days or calendar date that specifies the time allowed for completion of the work described in the Contract, including authorized extensions.

**Contractor.** Any individual, partnership, corporation, or joint venture that contracts with the Department and the County of Loudoun to perform the prescribed work.

**County** - The County of Loudoun in the Commonwealth of Virginia.

**Cul-de-sac.** An area at the terminus of a dead-end street or road that is constructed for the purpose of allowing vehicles to turn around.

**Culvert.** A structure that is not classified as a bridge which provides an opening under any roadway.

**Cut.** The portion of a roadway formed by excavating below the surface of the earth.

-D-

**Day.** Unless otherwise stated, a calendar day.

**Deflection.** The vertical movement occurring between the supports of a bridge superstructure or its components (beams, girders, and slabs) that results from their own weight and from dead and live loads. Although all parts of a structure are subject to deflections, usually only those deflections that occur in the superstructure are of significance during construction.

**Department.** Loudoun County and/or Virginia Department of Transportation.

**Deputy Commissioner.** The assistant to the Commissioner who performs such of the Commissioner's duties as have been delegated to him by the Commissioner.

**Developer.** Contractor.

**Design flood.** The magnitude of flood that a given structure can convey without exceeding a designated flood level.

**Disincentive.** A monetary deterrent used to discourage the Contractor from exceeding the contract time limit.

**Disposable material.** Material generally found to be unsuitable for roadway construction or material that is surplus.

**Disposal areas.** Areas generally located off the project right of way where unsuitable or surplus material is deposited.

**Drainage ditch.** An artificial depression constructed to carry off surface water.

Drawings. Plans.

-E-

**Earthwork.** The work consisting of grubbing, drainage, roadway excavation, embankment excavation, borrowing, grading, placing rock, and preparing subgrades.

**Easement (Right of way).** A grant of the right to use property for a specific use.

**Embankment.** A structure of soil, soil aggregate, or broken rock between the existing ground and subgrade.

**Employee.** Any person working on the project specified in the Contract who is under the direction or control of or receives compensation from the Contractor or subcontractor.

Engineer. The Director and Project Manager from Loudoun County Department of Construction and Waste Management to administer construction contracts on behalf of Board of Supervisor's, Loudoun County Office of Transportation Services, Parks Recreation and Community Services and VDOT's Chief Engineer.

**Equipment.** Machinery, tools, and other apparatus, together with the necessary supplies for upkeep and maintenance, that are necessary for acceptable completion of the work.

Loudoun County Division I General Requirements 01000-5

**Extra work.** An item of work that is not provided for in the Contract as awarded but that is found to be essential to the satisfactory fulfillment of the Contract within its intended scope.

-F-

**Falsework.** A framework of wood or steel used to support forms for the construction of concrete slab spans or t-beams, or provide temporary support for structural units during the construction or reconstruction of permanent supports.

**Federal agencies or officers.** An agency or officer of the federal government and any agency or officer succeeding in accordance with the law to the powers, duties, jurisdictions, and authority of the agency or officer mentioned.

**Flood frequency.** A statistical average recurrence interval of floods of a given magnitude.

**Force account work.** Prescribed work in lieu of a Change Order of a contractual status performed by the Contractor and compensated for as specified in Section 109.05.

**Formwork.** A temporary structure or mold used to retain the plastic or fluid concrete in its designated shape until it hardens. Formwork shall be designed to resist the fluid pressure exerted by plastic concrete and additional fluid pressure generated by vibration and temporary construction loads.

**Frontage street or road.** A local street or road auxiliary to and located on the side of a highway for service to abutting property and adjacent areas and control of access.

-G-

Gage. U.S. Standard Gage

**Grade separation.** Any structure that provides a traveled way over or under another traveled way or stream.

-H-

**Highway.** The entire right of way reserved for use in constructing or maintaining the roadway and its appurtenances.

**Historical flood level.** The highest flood level that is known to have occurred at a given location.

**Holidays.** The days specifically set forth in Section 105.09.

**Hydrologic data sheet.** A tabulation of hydrologic data for facilities conveying a 100 year discharge equal to or greater than 500 cubic feet per second.

-l-

**Incentive.** A monetary amount used to encourage the Contractor to complete work prior to the time limit specified in the Contract.

**Inspector.** The Engineer's authorized representative who is assigned to make detailed inspections of the quality and quantity of the work and its conformance to the provisions of the Contract.

**Invert.** The lowest point in the internal cross section of a pipe or other drainage structure.

-J-K-

**Joint venture.** Two or more individuals, partnerships, corporations, or combinations thereof that join together for the purpose of bidding on and constructing a project.

-L-

**Laboratory.** The testing laboratory of the Department or any other testing laboratory that may be designated by the Engineer.

**Liquidated damages.** Compensatory damages as set forth in the Contract, paid by the Contractor to the Department when the Contractor fails to complete the project within the time frame specified in the Contract. These damages include, but are not limited to, additional costs associated with administration, engineering, supervision and inspection of the project.

-M-

Material. Any substance that is used in the work specified in the Contract

**Median.** The portion of a divided highway that separates the traveled ways.

-N-

Notice of Award. The date of contract execution.

**Notice to Proceed**. A written notice to the Contractor that advices him of the date on which prosecution of the work shall begin.

-0-

**Ordinary high water.** A water elevation based on analysis of all daily high waters that will be exceeded approximately 25 percent of the time during any 12 month period.

**Overtopping flood.** The magnitude of flood that just overflows the traveled way at a given structure and/or on the approach traveled way of such structure.

**Owner** – The Owner is the Board of Supervisors of Loudoun County, Virginia and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Owner means the Owner or its authorized representative of the Board of Supervisors for this contract.

The Department of Construction and Waste Management, County of Loudoun will designate a single Owner's representative with the title of Project Manager (PM) who will have the power to act, within the scope of this delegated authority, for and on the behalf of the Owner, in accordance with the terms of the Contract.

For purposes of change in the work, the term "Owner" or "Owner's Representative" specifically excludes any all inspectors having specification and material compliance responsibilities.

-P-Q-

**Pavement structure.** The combination of sub base, base, and surface courses that is placed on a sub grade to support the traffic load and distribute it to the roadbed.

**Pay item.** A specifically described unit of work for which a price is provided in the Contract.

**Phase inspection.** The inspection of work at predetermined stages in lieu of continuous inspection.

**Plans.** The approved plans and standard drawings, profiles, cross sections, computer output listings, supplemental drawings or exact reproductions thereof, and all subsequent approved revisions thereto that show the location, character, dimensions, and details of the work specified in the Contract.

**Prequalification.** The procedure used to assure the Department of the Contractor's ability to perform the work, experience in similar work, and sufficiency of equipment to accomplish the work and that the Contractor's financial resources will permit financing the work.

**Profile grade.** The line of a vertical plane intersecting the top surface of the proposed wearing surface, usually along the longitudinal center line of the roadbed.

**Project.** The work specified to be performed in the Contract.

Project Manager - The individual designated by the Director, Loudoun County Department of Construction and Waste Management to administer the construction contract on behalf of the County, to include Loudoun County Office of Transportation Services and Parks Recreation and Community Services (PCRS).

**Project showing.** The scheduled event at which the Department's representative meets with prospective bidders to describe and answer questions regarding the proposed work.

**Proposal.** The document sent by the Department to prospective bidders that describes the work for which bids will be accepted; it includes the official form on which the Department requires bids to be submitted for the work described.

-R-

**Ramp.** A connecting roadway between two highways or traveled ways or between two intersecting highways at a grade separation.

**Right of way.** A general term denoting land, property, or interest therein, usually in a strip, that is acquired for or devoted to transportation facilities but is not meant to denote the legal nature of ownership.

**Resident Engineer** (may also be referred to as Inspector/County's Representative) - The County reserves the right by separate contract to obtain a construction engineering and inspection consultant to act on behalf of the County to apprise the Engineer as to the progress and quality of the work and who shall monitor compliance with the Contract Documents. The County's Representative shall have no authority to bind the

County to additional time or funds unless such authority is agreed upon by the Project Manager in writing.

**Road.** A general term denoting a public way for purposes of vehicular travel including the entire area within the right of way; the entire area reserved for use in constructing or maintaining the roadway and its appurtenances.

**Roadbed.** The graded portion of a highway within the top and side slopes that is prepared as a foundation for the pavement structure and shoulders.

**Roadbed material.** The material below the sub grade in cuts, embankments, and embankment foundations that extends to a depth which affects the support of the pavement structure.

**Roadside.** A general term that denotes the area within the right of way that adjoins the outer edges of the roadway; extensive areas between the roadways of a divided highway.

**Roadside development.** Items that are necessary to complete a highway that provide for the preservation of landscape materials and features; rehabilitation and protection against erosion of areas disturbed by construction through placing seed, sod, mulch, and other ground covers; and such suitable plantings and other improvements as may increase the effectiveness and enhance the appearance of the highway.

**Roadway.** The portion of a highway or parking area and associated access roads within the limits of construction and all structures, ditches, channels, and waterways that are necessary for the correct drainage thereof.

-S-

**Safety Manager.** The individual designated by the Director of Loudoun County Office of Capital Construction to review the Work for compliance with safety regulations and report to the Project Manager.

**Sea water.** Water in which total alkali chlorides calculated as sodium chloride are more than 0.10 percent of total solids.

**Select borrow.** Borrow material that has specified physical characteristics.

**Select material.** Material obtained from roadway cuts, borrow areas, or commercial sources that is designated or reserved for use as a foundation for the sub base, sub base material, shoulder surfacing, or other specified purposes.

**Shoulder.** The portion of the roadway contiguous with the traveled way that is for the accommodation of stopped vehicles, emergency use, and lateral support of the base and surface courses.

**Sidewalk.** The portion of the roadway constructed primarily for the use of pedestrians.

**Skew.** The acute angle formed by the intersection of a line normal to the center line of the roadway with a line parallel to the face of the abutments or, in the case of culverts, with the center line of the culverts.

**Special provision.** A document that sets forth specifications or requirements for a particular project.

**Special provision copied note.** A document that sets forth specifications or requirements, usually limited in scope, for a particular project.

**Specialty item.** An item of work designated as "Specialty Item" in the proposal that is limited to work which requires highly specialized knowledge, craftsmanship, or equipment that is not ordinarily available in contracting organizations prequalified to bid and is usually limited to minor components of the overall Contract.

**Specifications** - The general term comprising all the directions, provisions, and requirements contained in the Virginia Department of Transportation, "Road and Bridge Specifications", current Edition, Loudoun County Specification Revisions to VDOT Division 1 General Provisions, Loudoun County General Conditions, Special and Technical Provisions and any Addenda and Change Orders or Supplemental Agreements that may be issued, all of which are necessary for the proper performance of the Contract.

**Standard drawings.** Whenever the Plans or specifications refer to "Standards" or "Standard Drawings" such reference shall be construed to mean the set of standard drawings issued by Virginia Department of Transportation, current edition, and entitled "Road and Bridge Standards of the Virginia Department of Transportation". Only those standard drawings specifically referred to by number in the various Contract Documents are applicable to work on this Contract.

State. Loudoun County Virginia.

**Station.** When used as a definition or term of measurement, 100 linear feet.

**Street.** A general term denoting a public way for purposes of vehicular travel including the entire area within the right of way; the entire right of way reserved for use in constructing or maintaining the roadway and its appurtenances.

**Structures.** Bridges, culverts, catch basins, inlets, retaining walls, cribs, manholes, end walls, buildings, steps, fences, sewers, service pipes, underdrains, foundation drains, and other features that may be encountered in the work and are not otherwise classed herein.

**Sub base.** A layer(s) of specified or selected material of designed thickness that is placed on a subgrade to support a base course.

**Subcontractor.** Any individual, partnership, corporation, or joint venture to whom the Contractor, with the written consent of the Department, subcontracts part of the Contract.

**Subgrade.** The top surface of a roadbed shaped to conform to the typical section on which the pavement structure and shoulders are constructed.

**Subgrade stabilization.** The modification of roadbed soils by admixing with stabilizing or chemical agents that will increase the load bearing capacity, firmness, and resistance to weathering or displacement.

**Substructure.** The part of a structure that is below the bearings of simple and continuous spans, skewbacks of arches, and tops of footings of rigid frames, together with the back walls, wingwalls, and wing protection railings.

**Superintendent.** The executive representative of the Contractor who is authorized to receive and fulfill instructions from the Engineer and who supervises and directs the construction.

**Superstructure.** The portion of a structure that is not defined as substructure.

**Supplemental specifications.** Additions and revisions to these specifications that are adopted after the issuance of the 2002 VDOT Road and Bridge Specifications.

**Surety.** A corporate entity bound with and for the Contractor for full and complete fulfillment of the Contract and for payment of debts pertaining to the work. When applied to the proposal guaranty, it refers to the corporate body that engages to be responsible in the execution by the bidder, within the specified time, of a satisfactory Contract and the furnishing of an acceptable payment and contract bond.

**Surface course.** One or more layers of a pavement structure designed to accommodate the traffic load, the top layer of which resists skidding, traffic abrasion, and disintegrating effects of weather. The top layer is sometimes called the wearing course.

**Surplus material.** Material that is present on a project as a result of unbalanced earthwork quantities, excessive swell, slides, undercutting, or other conditions beyond the control of the Contractor

**Suspension.** A written notice issued by the Engineer to the Contractor that orders the work on a project to be stopped wholly or in part as specified. The notice will include the reason for the suspension.

-T-U-

**Temporary structure.** Any structure that is required to maintain traffic while permanent structures or parts of structures specified in the Contract are constructed or reconstructed. The temporary structure shall include earth approaches.

**Theoretical maximum density.** The maximum compaction of materials that can be obtained in accordance with the values established VTM-1.

**Ton.** A short ton; 2,000 pounds avoirdupois.

**Top of earthwork.** The uppermost surface of the embankment excavation, exclusive of select material, that is shaped to conform to the typical section.

**Traveled way.** The portion of the roadway for the movement of vehicles, exclusive of shoulders.

-V

**Vouchered.** The action of approval by the Department; constitutes the date of release to the County for payment.

-W-X-Y-Z-

Wearing course. See Surface course.

**Work.** The furnishing of all materials, labor, tools, equipment, and incidentals necessary or convenient for the successful completion of the project and the carrying out of the duties and obligations specified in the Contract.

**Working drawings.** Stress sheets, shop drawings, erection plans, falsework plans, framework plans, cofferdam plans, bending diagrams for reinforcing steel, or any other supplementary plans or similar data the Contractor is required to submit to the Engineer for review.

**Work order.** A written order issued by the Engineer to the Contractor that specifies changes in the plans or quantities or both within the scope of the Contract and that establishes the basis of payment and time adjustments for the work affected by the changes.

#### 1.2 Abbreviations and Acronyms.

In these specifications and in other contract documents, the following abbreviations and acronyms shall be interpreted as follows:

**AAR** Association of American Railroads

ARRA American Recovery and Reinvestment Act 2009

**AASHTO** American Association of State Highway and Transportation Officials

**ABS** Acrylonitrilebutadienestyrene (an elastomer)

AC Alternating current

ACI American Concrete Institute
ADT Annual average daily traffic

**AED** Associated Equipment Distributors

AISC American Institute of Steel Construction

AISI American Iron and Steel Institute

**ANSI** American National Standards Institute

**APA** American Plywood Association

**API** American Petroleum Institute; American Pipe Institute

**AREA** American Railway Engineering Association

**ASCE** American Society of Civil Engineers

**ASME** American Society of Mechanical Engineers **ASTM** American Society for Testing and Materials

**AWG** American wire gage

**AWPA** American Wood Preservers Association

**AWS** American Welding Society

**AWWA** American Water Works Association

**BOCA** Building Officials and Code Administrators

C Celsius, when preceded by "degree(s)"

**CBR** California bearing ratio

CRSI Concrete Reinforcing Steel Institute

DBE Disadvantaged Business Enterprise

**DOE** Department of Energy

**DC** Direct current

**DHV** Design hourly volume

**EEI** Edison Electric Institute

EECBG Energy Efficiency and Block Grant
EEO Equal employment opportunity
EIA Electronic Industries Association
EPA Environmental Protection Agency

**EPDM** Ethylenepropylenedienemonomer (an elastomer)

**F** Fahrenheit, when preceded by "degree(s)"

**F/A** Filler/asphalt ratio

**FHWA** Federal Highway Administration

**FS** Federal Specifications, General Services Administration

ICEA Insulated Cable Engineers AssociationIMSA International Municipal Signal AssociationITE Institute of Transportation Engineers

LCD Liquid crystal display
LPG Liquid petroleum gas

MBE Minority Business Enterprise
MEKP Methyl ethyl ketone peroxide

MIL Military specifications

MSDS Materials Safety Data Sheet

**MUTCD** Manual on Uniform Traffic Control Devices for Streets and Highways and

the Virginia supplement to same

**NEC** National Electrical Code

NEMA National Electrical Manufacturers Association
NIST National Institute of Standards and Technology

NRC Nuclear Regulatory Commission
PCI Prestressed Concrete Institute

**PE** Polyethylene

PTL Plywood Testing Laboratory

PVC Polyvinylchloride PVF Polyvinylfluoride

REA Rural Electrification Administration
SAE Society of Automotive Engineers
SPIB Southern Pine Inspection Bureau
SSPC Steel Structures Painting Council

**TAPPI** Technical Association of Pulp and Paper Industry

**TFE** Polytetrafluoroethylene

**UL** Underwriters' Laboratories, Inc.

VAC Volts alternating current
VDC Volts direct current

**VDOT** Virginia Department of Transportation

VEP Value engineering proposalVFA Voids filled with asphaltVMA Voids in mineral aggregate

**VOSH** Virginia Occupational Safety and Health agency

**VTM** Virginia test methods; voids in total mix

WBE Women Business Enterprise

**END OF SECTION 01000**